

ABSTRACT

An object of the present invention is to provide a honeycomb filter for purifying exhaust gases that can almost completely burn and remove particulates accumulated on the wall portion in a honeycomb filter regenerating process and that allows residual ashes on the wall portion after the regenerating process to easily move inside a through hole because the ashes are easily separated from the wall portion.

The present invention is directed to a honeycomb filter for purifying exhaust gases, having a structure in that a columnar body made of porous ceramics, which has a number of through holes placed in parallel with one another in the length direction with wall portion interposed therebetween, is designed so that one of or all of the wall portion that separate the through holes from each other is/are allowed to function as a filter for collecting particulates, wherein a length l (mm) of the longest side in a cross section perpendicular to the length direction of the through hole and a length L (mm) in the length direction of the columnar body satisfy the following relationship: $60 \leq L/l \leq 500$, and a surface roughness R_a (according to JIS B 0601) of the inner wall of the through hole satisfies the following relationship: $R_a \leq 100 \mu\text{m}$.